

COUNTY ENVIRONMENTAL HEALTH ASSESSMENT AND IMPROVEMENT PLAN 2004

INTRODUCTION

The Bergen County Department of Health Services is composed of seven divisions and five offices, providing comprehensive environmental and public health services as required by regulatory mandates and in response to identified community needs. The department applies scientific information and the skills of highly trained health and environmental professionals toward achieving departmental objectives to promote health, prevent disease and protect the environment. The ability of the department to best serve the county residents is dependent upon networking with community resources and engaging community involvement.

The Office of Environmental Services falls under the Division of Public Health Services. Included within this office are Environmental Protection, Occupational Health, Right-to-Know, Hazardous Materials Response Team, and Consumer Health. The Environmental Office assumes the responsibility as the County's Environmental lead enforcement agency designee as per the County Environmental Health Act (CEHA). Individual programs are designed to zero in on such pervasive problems as pollution of the air and water, excessive noise, hazardous waste / emergency response, pesticide misapplication, solid waste disposal and weapons of mass destruction. The Office responsibilities extend to the provision of environmental regulatory compliance assistance provided to county government, municipalities and the business community. Examples include: Right-to Know Compliance, Underground Storage Tanks Regulatory Compliance, Regulated Medical Waste, and Asbestos Hazard Control.

STAFFING

The staff of the Environmental Services Program is comprised of fifteen technical and two clerical personnel. The management structure within the Office includes the Administrator, Coordinator, and two Supervisors. Within the management group, there is a combined 61 years of experience in the environmental field. The educational backgrounds within the Environmental Staff are varied, including Environmental Science, Aquatic Biology, Wildlife Biology, Geography, Geology, Chemistry, Computer Science, and Electronics. Within this group, five of the personnel hold MS degrees and ten hold BS degrees. Additionally, there are fourteen Registered Environmental Health Specialists within Consumer Health.

STATEWIDE STRATEGIC ENVIRONMENTAL GOALS

1. Goal: Clean Air

The air throughout Bergen County will be healthful to breathe, and air pollutants will not damage our forests, land and water bodies.

Each person breathes approximately 3,400 gallons of air a day. Activities such as driving cars, burning fossil fuels and manufacturing chemicals contaminate the air. However, even with substantial economic expansion and population growth, the quality of the air we breathe has improved over the last decades. There are three indicators utilized to assess air quality in a given area, the Pollutant Standards Index, Air Toxics Emissions, and the quantity of pollutant emissions.

Pollutant Standards Index (PSI)

The EPA's Pollutant Standards Index (PSI) provides a uniform system for measuring pollution levels for five of six major air pollutants regulated under the Clean Air Act. The PSI is reported as a value between 0 and 500 that corresponds to a health descriptor like "good," or "unhealthful." The PSI converts daily measured pollutant concentration in a community's air to a number on a scale of 0 to 500. The most important number on the scale is 100. A PSI level in excess of 100 indicates that a pollutant is in the unhealthful range for that day.

The pollutants indexed by the PSI are called "Criteria Pollutants." They are pollutants for which science-based health criteria are used to determine the allowable ambient (outdoor) air concentrations. The Clean Air Act directs EPA to regulate criteria pollutants because of their impact on human health and the environment. They are: carbon monoxide (CO); Ground-level ozone (O₃); Lead (Pb); Nitrogen dioxide (NO₂); Particulate matter (PM₁₀); and, Sulfur dioxide (SO₂). The standards or allowable concentrations for these six pollutants are known as National Ambient Air Quality Standards (NAAQS). Note: Because standards (e.g., particulate matter and ozone) are periodically revised, the PSI is modified as needed to reflect those changes.

Air quality is monitored at three locations in Bergen County; Hackensack, Cliffside Park and Teaneck. The parameters measures at these locations include 8 hour average – ozone; 1 hour average – ozone; 8 hour average – carbon monoxide. During 2002 (most recent historical data available), Teaneck has had 18 exceedences for the 8 hour average – ozone, and 4 exceedences for the 1 hour average for ozone. From 2000 – 20002, the number of days out of compliance has been increasing. Between 1999 and 1989, there were only six recorded exceedences for Bergen County. During 1988 and 1987, the number of exceedences was far greater at 25. Exceedences for carbon monoxide have only occurred in 1989 (1) and 1986 (4).

Indicators:

- i. Exceedences of the PSI. (# Ozone Action Days, when ozone exceeds health limits)
- ii. The number of permitted minor source & "B" source facilities, number of inspections, and compliance rates (% of gas stations and % of dry cleaner facilities in compliance)
- iii. The number of citizen complaints investigated.

Milestone:

Bergen County will continue to meet the NAAQS for Criteria Air Pollutant Emissions.

Bergen County will identify and evaluate local emission sources, such as air toxics.

By 2005, all minor source & “B” source facilities will be identified.

Activities:

- Bergen County will continue to monitor for exceedences of the PSI. On 18 occasions during 2002, the 8 hour average for ozone was exceeded.
- Bergen County will continue to inspect minor and B source facilities to determine compliance with the State's air pollution control regulations. Emphasis will be placed on inspecting at least 20% of the gas station universe.
- Bergen County will continue to respond to citizen complaints received by this office.
- Bergen County will participate in the air toxics inventory pilot project.
- Bergen County will continue to conduct enforcement activities as they relate to air pollution control.
- Bergen County will develop the capabilities to continue to integrate GIS into Clean Air Activities.

2003 Narrative

During the first three quarters for the year 2003, the BCDHS inspected 127 Minor Source facilities including gas stations, dry cleaners, and paint shops and B sources. Additionally, 155 complaint investigations were received. Through the third quarter, 11 violations were noted.

The BCDHS has completed a third phase of the Air Toxics Pilot Project. In the first phase, the BCDHS generated a listing of potential chromium users within the County. Phase two of the Pilot involve the inspection of chromium generating facilities within Bergen County. Phase three of the Pilot involved the inspection of emergency generators throughout the County.

2A. Goal: Clean and Plentiful Drinking Water

Surface and ground water will be clean sources of potable water. Every person in Bergen County will have safe drinking water. Adequate quantities of surface and ground water will be available for all uses.

Status of Drinking Water Quality in New Jersey

In 1995, NJDEP began a comprehensive evaluation of the status and trends of drinking water quality statewide. One of the general environmental indicators for drinking water quality is Maximum Contaminant Level (MCL) violation data. This indicator is used to measure the microbiological, chemical and radiological safety of drinking water. A violation is issued when the average of several samples exceeds the Maximum Contaminant Level.

Within Bergen County there are 22 public community water systems serving the same people year-round (e.g., in homes or businesses). Additionally, there are 13 non-transient non-community water systems serving the same people, but not year-round (e.g., schools with their own water system) and, 34 transient non-community water systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

Indicators:

- i. The number of PNC water systems inspected and the compliance rates for the PNC-transient and non-transient water systems.
- ii. The number of private wells sampled and found to be contaminated.
- iii. The number of ground and surface water complaints received based upon types.

Milestone:

95 percent of the public non-community water systems within Bergen County will provide water that meets chemical and microbiological drinking water standards.

Activities:

- Bergen County will continue to inspect non-transient PNC water systems at least every two years, and transient water systems every four years.
- Bergen County will continue to implement the NJDEP Zero Tolerance Policy for PNC systems found in violation.
- Bergen County will periodically review the NJDEP public water database to determine if any PNC systems have failed to sample as required and undertake enforcement to return violators to compliance.
- Bergen County will GPS any PNC systems that are not yet located.
- Bergen County will develop a database of private wells that have been found to be impacted by contamination. This database will be developed in conjunction with the NJDEP.
- Bergen County will continue to undertake activities to educate private well owners about water quality and testing.
- Bergen County will begin to collect & tabulate microbiological and/or chemical sampling results for PNC systems.

2003 Narrative

There are thirteen non-transient public non-community and thirty four transient public non-community water systems within Bergen County. Inspections of the public non-community water systems are scheduled for the fourth quarter of 2003. The BCDHS continues to enforce the Zero-Tolerance Policy established by the NJDEP, Bureau of Safe Drinking Water.

2B. Goal: Clean Surface Water

Surface water provides habitats for aquatic life, food (e.g., fish and shellfish), recreation opportunities (e.g., boating and swimming), resources for industrial uses, and drinking water within Bergen County. The quality of our surface water in rivers, lakes, wetlands and estuaries often depends on activities that take place within the watersheds.

Watersheds are those land areas that catch rain or snow and drain to specific marches, streams, lakes or to ground water. Bergen County is served by the Ramapo River Watershed, the Saddle River Watershed, the Pascack Creek Watershed, the Hackensack River Watershed, the Lower Passaic River Watershed, and

the Lower Hudson River Watershed. These areas are designated as Principal Watersheds of New Jersey by the NJDEP. These watersheds fall within three Watershed Management Areas (WMAs). The three WMAs within Bergen County are, WMA-3, WMA-4, and WMA-5.

Indicators:

- i. The number of citizen complaints received pertaining to surface water pollution.
- ii. The number of enforcement actions taken and the penalties assessed.
- iii. The number of river miles of Bergen County Streams, which come under the 303 (d) assessment.

Milestones:

By the year 2007, there will be a 50% reduction of the river miles addressed in the 1998 303(d) Report for Bergen County.

Activities:

- Bergen County will continue to respond to complaints received by this office pertaining to surface water pollution.
- Bergen County will continue to conduct enforcement actions for violations pertaining to water pollution, and assess penalties for violations of the Water Pollution Control Act.
- Bergen County will continue to conduct surface water monitoring in conjunction with NJDEP.

2003 Narrative

During the first three quarters of the year 2003, the BCDHS had received 45 complaints pertaining to some form of surface water pollution. 9 Notices of Violation were issued. Additionally, thirty samples were collected for the water-monitoring program.

Through the WMA process, 303(d) waters are being addresses as a primary focus of the Watershed Plan for each of the three WMAs within Bergen County. Action Now projects, which are part of the WMA process, are being supported by the 319 (h) funding from the EPA and are currently being used to address impaired water bodies.

3. Goal: Safe and Healthy Communities

Communities within Bergen County will be free from unacceptable human health and ecological risks due to direct exposure from hazardous substances and other potentially harmful agents. Natural resources will be managed to protect the public from floods, fires and storms.

Indicators

- i. Number of brownfields.
- ii. Number of contaminated sites. (Superfund and other sites, sorted by type and environmental impacts)

- iii. Number of haz-mat incidents. (by type and outcome of any clean ups)
- iv. Household hazardous waste collection statistics.
- v. Number of Solid waste facilities, number of inspections and compliance rates
- vi. Number of solid waste citizen complaints, types and outcomes
- vii. Number of homes tested for radon and results.
- viii. Amount of lawn care products used.
- ix. Number of citizen complaints concerning pesticides and outcomes.
- x. Number of citizen noise complaints and outcomes
- xi. Number of Residential Underground Storage Tanks addressed

Brownfields

The industrial growth that occurred after World War II left us with numerous contaminated sites that have to be addressed to reduce the risks to current and future generations. While many sites have been cleaned up, many more are still in need of attention. This is especially true in urban areas, where contaminated sites can create a barrier to redevelopment (brownfields). An inventory generated by the NJDEP lists sixty six (66) brownfield sites within Bergen County. The status of these sites represents a data gap and further investigation is needed. A copy of this list is appended to this report.

Milestone:

By the year 2005, all brownfields in Bergen County will be located and mapped.

Activities:

- Determine the status of brownfield sites listed by the NJDEP.
- GPS all brownfield sites.

Known Contaminated Sites of New Jersey (KCS List)

The 2001 report from the New Jersey Dept. of Environmental Protection, "Known Contaminated Sites in New Jersey," categorizes contaminated sites in the following way; "Category A - Sites with on-site sources of contamination", "Category B - Sites with unknown sources of contamination", and "Category C - Sites with closed cases with restrictions". The Report list 1257 Category A sites, 36 Category B sites and 103 Category C sites in Bergen County. Status of this site list continues to change as new sites are added. Future environmental assessment reports will begin to address the interrelationship identified from this state listing.

Included in the KCS List are Superfund Sites. This list is comprised of sites under Federal control through the US EPA. There are currently nine (9) sites within Bergen County that are on the Superfund List. The list of sites and their status can be found in the following table. The status of these sites will be addressed in future assessments.

Site Name	CERCLIS ID	Proposed Listing Date	Final Listing Date	Construction Listing Date	Deletion Listing Date
Curcio Scrap Metal, Inc.	NJD011717584	1/22/87	7/22/87	9/30/97	
Fair Lawn Well Field	NJD980654107	12/30/82	9/08/83		
Industrial Latex Corp.	NJD981178411	6/24/88	3/31/89		
Lodi Municipal Wells	NJD980769301	10/15/84	8/30/90	9/27/93	12/29/98
Maywood Chemical Co.	NJD980529762	12/30/82	9/08/83		
Scientific Chemical Processing	NJD070565403	12/30/82	9/08/83		
Universal Oil Products (Chemical Div.)	NJD002005106	12/30/82	9/08/83		
Ventron/Velsicol	NJD980529879	9/08/83	9/21/84		
Witco Chemical Corp. (Oakland Plt)	NJD045653854	6/24/88	10/04/89	9/28/92	9/29/95

Milestones:

By the year 2004, all KCSL sites will be located.

Activities:

- Assess the status of the KCSL sites.

Household Hazardous Waste

Various products commonly used by residents in and around the home, such as batteries, fertilizers, pesticides, paints, thinners, pool chemicals, and automotive supplies contain ingredients that render them hazardous. Improper disposal of these products can result in damage to human health and the environment. The Bergen County Utilities Authority (BCUA) in conjunction with the BCDHS conducts a number of household hazardous waste collection days to insure the proper disposal of these products.

Milestone:

Increase the awareness and participation the HHWCD over the next 5 years..

Activities:

- Continue to support the BCUA in the household hazardous waste activities.

- Continue to supply information to the public regarding the proper disposal of household hazardous waste.
- Compile past years data on participation and the amount of hazardous waste collected at the events.
- Continue to promote the household hazardous waste collection days.

2003 Narrative

Seven household hazardous waste days were held in Bergen County during the spring, summer, and fall of 2003. During the first five of these events the following household wastes were collected from Bergen County Residents. Waste collected during the last two events have not yet been tabulated.

Antifreeze	25 drums	Bulk oil paint	72 drums
Corrosive Solids	12 drums	Fire extinguishers	9 drums
Flammable Solids	14 drums	Drycell Batteries	38 drums
Lead Acid Auto Batteries	1022	Cyanide	1 drums
Mercury	7 drums	Non-Hazardous Solids	420 yards³
Oxidizer Solids	8 drums	Pesticide Liquids	48 drums
Propane Cylinders	4013	Waste Oil	8875 gallons
Aerosols	32 – fiber boxes	Asbestos	5 boxes
Corrosive Liquids	44 drums	Dry Cell Batteries	38 drums
Flammable Liquides	86 drums	Fluorescent Lights	91 boxes
Lead Acid batteries	6 drums	Ni-Cad Batteries	13 drums
Lithium Batteries	3 drums	Oil Paint Lab Pack	81 boxes
Oxidizer Liquids	11 drums	PCBs	12 drums
Pesticide Solids	23 fiber boxes	Small Propane Cylinders	16 drums

Haz-Mat / Emergency Response

One of the core functions of the BCDHS as participants in the CEHA Program, is responding to hazardous materials incidents. Haz-Mat incidents involve responding to a wide range of events including motor vehicle accident resulting in a discharge of petroleum products, an explosion at a chemical plant, illegal dumping of chemicals, and the assistance rendered to a resident with a basement full of old and potentially dangerous chemicals.

Milestone:

Progressively reduce the number and impact of serious hazardous materials incidents occurring within Bergen County by improving the response capabilities, training, knowledge and cooperation with industry.

Activities:

- Bergen County will continue to respond to Haz-Mat incidents within our jurisdiction
- Enforcement activities will be conducted as needed to correct outstanding violations.
- A program of "preplanning" of industrial and commercial sites utilizing hazardous chemicals will be undertaken to increase familiarity with these sites as well as to work toward resolution of any outstanding environmental or health and safety issues.

- Equipment purchases and training will be tailored towards recognized community needs.

2003 Narrative

During the first three quarters of the year 2003, the BCDHS received 310 calls pertaining to emergency response activities. The BCDHS maintains 24 hour availability, 365 days per year, to respond to hazardous materials incidents.

Solid Waste Facilities

Within Bergen County there are a number of different type of Solid Waste Facilities. These include operating landfills, closed landfills, solid waste transfer stations, compost facilities and a class B recycling facility. Most of these facilities are inspected by the BCDHS as well as the NJDEP. A listing of the rate of inspection and number of facilities can be found in the table below.

Type of Facility	# of Facilities	Inspection Rate
Open Landfill	1	Once/yr
Class C Facilities	4	Once/yr
Transfer Station	9	Once/yr
Exempt Compost Facility/Leaf Transfer	24	Twice/yr
Class B Facilities	2	Once/yr

Milestones:

Complaints against solid waste facilities will decrease over the next 5 years.

Activities:

- Bergen County will carry out inspections of the solid waste facilities located within the County at the rate outlined above.
- As appropriate, Bergen County will conduct enforcement actions and assess penalties for violations of the Solid Waste Management Act.

2003 Narrative

During the first three quarters of 2003, the BCDHS conducted 33 solid waste inspections of compost facilities, operating landfills, and transfer stations within Bergen County.

Solid Waste Complaints

Complaints are received by the BCDHS pertaining to solid waste issues. These complaints deal with such issues as improper fill material, operating an unregistered solid waste facility, improper disposal of solid

waste, improper disposal of regulated medical waste, and transporting solid waste in unregistered solid waste vehicles and/or containers.

Milestones:

Complaints pertaining to solid waste issues will continue to decline.

Activities:

- Bergen County will respond to complaints pertaining to solid waste violations that are received from the public or from NJDEP.
- When violations are identified, Bergen County will conduct enforcement actions and assess penalties for violations of the Solid Waste Management Act.
- Information concerning proper disposal of regulated medical waste will continue to be distributed.
- Bergen County will continue to carry out NJDEP's exempt decal registration program for self generating solid waste haulers.

2003 Narrative

During this period, the BCCDHS responded to 42 complaints pertaining to solid waste issues, and issued 2 Notices of Violation.

The BCDHS continues to participate in the NJDEP's exempt decal registration program. During the first three quarters, the BCDHS conducted 202 transporter decal registration interviews.

Pesticide Inspections and Complaints

The BCDHS has been actively involved with carrying out pesticide application inspections for the NJDEP as part of a Pilot Program. Inspections of landscapers, golf courses, schools, and restaurants are conducted throughout the year. The table below illustrates the number of inspections that are carried out.

Type of Facility	# of Inspections
Landscapers	30
Golf Courses	5
Schools	15
Restaurants	10
State Unregistered Products	15

Milestones:

Compliance rate for properly registered applicators will continue to rise over the next 5 years.

Activities:

- Bergen County will continue to respond to complaints pertaining to pesticides.
- Bergen County will carry out inspections as outlined in the table above.
- Violations identified during inspections and complaint investigations will be referred to the NJDEP.

2003 Narrative

During the first three quarters of 2003, the BCDHS conducted 53 pesticide inspections of landscapers, schools, and food establishments. One complaints were referred back to the NJDEP, Pesticide Control Program.

Milestones:

Over the next 7 years, the number of residents of Bergen County using Integrated Pest Management will significantly increase.

Activities:

- To assess the data provided by the NJDEP.
- To address the data gaps in the information provided.
- Continue to refer citizens with lawn care related questions to the Cooperative Extension Service.
- Continue to support the Partnership for Community Health Water Pollution Goal Team's efforts in obtaining 319 (h) grant funding for non-point source pollution as it relates to pesticide usage.

2003 Narrative

The BCDHS has been working with the NJDEP, Pesticide Control Program in carrying out a Pilot Project, which addressed pesticide usage within the County. The Program is geared toward the usage of lawn care products and the promotion of Integrated Pest Management (IPM). During the first three quarters of 2003, the BCDHS developed and carried out surveys of local groups on their use of IPM and use of lawn care products. The findings of the survey were turned over to the NJDEP, Bureau of Pesticide control.

Noise

The noise program within BCDHS involves responding to citizen complaints and supplying support for local enforcement of Noise Ordinances.

Milestones:

By the year 2005, 25% of the local municipalities will have adopted the model noise ordinance.

Activities:

- Bergen County will continue to respond to noise complaints, and take appropriate enforcement action when warranted.
- Bergen County will continue to support local noise control activities by providing equipment and technical support.

2003 Narrative

The noise program of the BCDHS continues to be a small program. During the first three quarters of 2003, the BCDHS received 22 noise complaints. When noise complaints are received, they are investigated to confirm that a violation of the State Noise Regulations exist, and then every effort is made to alleviate the problem.

Residential Underground Storage Tanks

In 1995, Bergen County in conjunction with the NJDEP began a Residential Underground Storage Tank Program. The need for such a program was highlighted by the continuous streams of bad press received by the NJDEP due to homeowners either being swindled by disreputable contractors or lost in the State's bureaucracy. Through the pilot program, Bergen County provides technical oversight for the homeowner in which there has been a release from an UST, and aids in the rapid transition to a clean closure and No Further Action Letter from the State. There are no charges to the homeowner for the services of either the BCDHS or the NJDEP within this program.

Milestone:

The number of residential underground storage tanks within the program will begin to decrease over the next 5 years.

Activities:

- Bergen County will continue to carry out the Residential Underground Storage Tank Program.
- Bergen County will continue to promote the program to the residents.

2003 Narrative

The Residential Underground Storage Tank Program continues to be a success story in Bergen County. The program which was started as a pilot, helps the Bergen County Residents handle the closure of their residential heating oil tanks and reduces the time and costs involved. During the first three quarters of 2003, the BCDHS participated in 150 closures.

4. Goal: Abundant Open Space

Natural and scenic landscapes, habitats and historic resources will be preserved. Every person will have the opportunity to visit an abundance of well-maintained parks, forests, wildlife areas and historic sites. The public will be given ample opportunity to learn about natural and historic resources and to have access to a wide variety of recreational experiences in both urban and non-urban settings.

In 1995 all property owned and operated by the County of Bergen Division of Parks and Recreation was mapped through a co-operative effort with the NJDEP-Natural Resources Division, the Bergen County Division of Parks and the Bergen County Department of Health Services.

Indicators:

- i. Number of acres of open space in Bergen County.

Milestone:

By 2005, all municipal open spaces will be mapped using GIS.

Activities:

- The County Open Space GIS coverage will be updated to reflect any changes.
- Municipal open spaces will be mapped using GPS.

2003 Narrative

Bergen County, through the Department of Planning, has the final draft of a County wide base map developed to be used for Geographic Information Systems (GIS) projects. This base map will allow the mapping of municipally owned open space to be a reachable goal in the near future. Additionally, through the WMA process, the evaluation and mapping of open space throughout the County is a goal for each of the three WMAs within Bergen County.

5. Goal: Open and Effective Government

Bergen County will fulfill its vision and mission and achieve its goals through the involvement of citizens and stakeholders as critical partners and through a commitment to quality principles and methods as a means to continuous improvement of its operations.

In December of 2000, Bergen County was selected as the lead for the Watershed Management Area (WMA) 5 grant from the NJDEP. As such, the BCDHS has been overseeing the development of a partnership of stakeholders from the WHA-5 watershed.

Indicators:

- i. The Environmental Program will actively be involved in reaching out to various grass roots environmental groups to help address local issues.
- ii. The Bergen County Department of Health will be the lead in the Watershed Management Area 5 management contract.

Milestones:

The BCDHS will coordinate the development of the WMA-5 Partnership.

The rate of requests for information will increase over the next five years.

Activities:

- Bergen County will look to encourage the support for partnership activities in other environmental areas through the formation of new goal teams, under the partnership umbrella.
- Bergen County will track requests for information and public outreach events.
- The Environmental Division will remain available to the residents of Bergen County on a 24 hour per day/ 7 days per week basis.

2003 Narrative

With the development of the WMA process, many of the goal team members from Bergen County, are now actively participating in watershed activities in WMA3, WMA4, and WMA5. The BCDHS is very actively involved as the lead agency for WMA5. Partnership subcommittees, to help enhance the watershed process, have sprung up within all three watersheds.

The BCDHS maintains an Emergency Hotline, which provides information and support for the residents of Bergen County. Additionally, the BCDHS, Emergency Response Team is available 24 hours per day, seven days per week, 365 days per year.